

Transmittal Letter to the United States
Designated/Elected Office (DO/EO/US)

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FORM PTO-1390

10/088836
JC10 Rec'd PCT/PTO 21 MAR 2002

Docket No. : **BM-87PCT**
U.S. Application No
International Application No **PCT/EP00/09633**
International Filing Date **October 2, 2000**
Priority Date Claimed **October 5, 1999**
Title of Invention **DEVICE FOR ACTUATING AN ELECTRONIC LOCKING SYSTEM AND/OR
A LOCK INTEGRATED IN A DOOR, A FLAP OR THE LIKE,
ESPECIALLY IN A MOTOR VEHICLE**
Applicant(s) for (DO/EO/US) **Reinhold Mathofer**

Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:

1. ☒ This is a **FIRST** submission of items concerning a filing under 35 U.S.C. 371.
2. ☐ This is a **SECOND** or **SUBSEQUENT** submission of items concerning a filing under 35 U.S.C. 371
3. ☒ This express request to begin national examination procedures 35 U.S.C. 371 (f) at any time rather than delay examination until the expiration of the applicable time limit set forth in 35 U.S.C. 371(b) and PCT Articles 22 and 39(1).
4. ☐ A proper Demand for International Preliminary Examination was made by the 19th month from the earliest claimed priority date.
5. ☒ A copy of the International Application as filed [35 U.S.C. 371(c)(2)].
 - a) ☒ is transmitted herewith (required only if not transmitted by the International Bureau)
 - b) ☐ has been transmitted by the international Bureau
 - c) ☐ is not required, as the application was filed in the United States Receiving Office (RO/US).
6. ☒ A translation of the International Application into English [35 U.S.C. 371(c)(2)]
7. ☐ Amendments to the claims of the International Application under PCT Article 19 [35 U.S.C. 371(c)(3)].
 - a) ☐ are transmitted herewith (required only if not transmitted by the International Bureau)
 - b) ☐ have been transmitted by the International Bureau
 - c) ☐ have not been made, however, the time limit for making such amendments has **NOT** expired
 - d) ☐ have not been made and will not be made
8. ☐ A translation of the amendments to the claims under PCT Article 19 [35 U.S.C. 371(c)(3)]
9. ☒ An oath or declaration of the inventor(s) [35 U.S.C. 371(c)(4)].
10. ☐ A translation of the annexes to the International Preliminary Examination Report under PCT Article 36 [35 U.S.C. 371(c)(5)]

Items 11. to 16. below concern other document(s) or information included:

11. ☒ An Information Disclosure Statement under 37 C.F.R. 1.97 and 1.98
12. ☒ An Assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included
13. ☒ A **FIRST** preliminary amendment
☐ A **SECOND** or **SUBSEQUENT** preliminary amendment.
14. ☐ A substitute specification
15. ☐ A change of power of attorney and/or address letter
16. ☒ (other items or information) **Eight sheets of drawings, PTO-1449 w/ 1 reference and International Search Report**

EXPRESS MAIL No. EV 096 601 375 US Deposited: **March 21, 2002**

I hereby certify that this correspondence is being deposited with the United States Postal Service Express mail under 37 CFR 1.10 on the date indicated above and is addressed to the Commissioner of Patents and Trademarks, Washington, DC 20231.

F. Kueffner

Friedrich Kueffner

March 21, 2002
Date

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U.S. Application No (if known, see 37 C F R. 1 50)
International Application No PCT/EP00/09633

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Docket No BM-87PCT

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17. X The following fees are submitted .

BASIC NATIONAL FEE [37 CFR 1.492(a)(1)-(5)]:

- X Search Report has been prepared by the EPO or JPO.... \$ 890.00
— International preliminary examination fee paid to USPTO [37 CFR 1.482]... \$ 710.00
— No International preliminary examination fee paid to USPTO [37 CFR 1 482]
but International search fee paid to USPTO [37CFR 1 445(a)(2)] \$ 740.00
— Neither International preliminary examination fee [37 CFR 1 482] nor
International search fee [37 CFR 1.445(a)(2)] paid to USPTO \$ 1040.00
— International preliminary examination fee paid to USPTO [37 CFR 1 482]
and all claims satisfied provisions of PCT Article 33 (2) to (4) \$ 100.00

ENTER APPROPRIATE BASIC FEE AMOUNT: \$ 890.00

Surcharge of \$ 130 00 for furnishing the oath or declaration later than ___20___30 months
from the earliest claimed priority date [37 CFR 1 492(e)]

Claims	filed	Extra	Rate
Total Claims	10	-20=	x \$ 18 =
Indep. Claims	1	-3=	x \$ 84 =
Multiple Dependent Claims (if applicable) + \$ 280 =			

TOTAL OF ABOVE CALCULATIONS: \$ 890.00

Reduction by ½ for filing by small entity, if applicable. Verified Small Entity
Statement must be filed also [Note 37 CFR 1 9.1.27, 1.28]

(divided by 2)

SUBTOTAL: \$ 890.00

Processing fee of \$ 130 00 for furnishing the English Translation later than ___20___30 months
from the earliest claimed priority date [37 CFR 1 492(f)]

TOTAL NATIONAL FEE: \$ 890.00

Fee for recording the enclosed assignment [37 CFR 1 21(h)] The assignment must be
accompanied by an appropriate cover sheet [37 CFR 3 28.3.31]. \$ 40.00 per property

\$ 40.00

TOTAL FEES ENCLOSED: \$ 930.00

AMOUNT TO BE REFUNDED: Refunded \$

AMOUNT TO BE CHARGED: Charged \$

- a) X A check in the amount of \$ 930.00 to cover the above fees is enclosed.
b) — Please charge my Deposit Account No. 11-1835 in the amount of \$ to cover the above fees
A duplicate copy of this sheet is enclosed
c) X The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any
overpayment to Deposit Account No 11-1835 A duplicate copy of this sheet is enclosed

NOTE: Where an appropriate time limit under 36 CFR 1 494 or 1 495 has not been met, a petition to revive [37 CFR 1 137(a) or (b)] must
be filed and granted to restore the application to pending status

SEND ALL CORRESPONDENCE TO:

Friedrich Kueffner
317 Madison Avenue
Suite 910
New York, NY 10017

Friedrich Kueffner
Name

signature

29,482
Reg. No.

March 21, 2002
Date

10/088836

1010 Rec'd PCT/PTO 2 1 MAR 2002

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

BM-87PCT

Applicant(s) : Reinhold Mathofer
Serial No. : NOT YET KNOWN (PCT/EP00/09633)
Int. Filed : October 2, 2000
For : DEVICE FOR ACTUATING AN ELECTRONIC LOCKING
SYSTEM AND/OR A LOCK INTEGRATED IN A DOOR,
A FLAP OR THE LIKE, ESPECIALLY IN A
MOTOR VEHICLE

Assistant Commissioner for Patents
Washington, D.C. 20231

PRELIMINARY AMENDMENT

S I R:

In advance of the first office action, please amend the claims
as follows:

IN THE CLAIMS

Replace current claims 1 - 10 by the enclosed amended claims
1 - 10. A marked-up version of amended claims 1 - 10 is also enclosed.

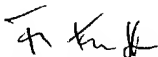
REMARKS

Claims 1 - 10 are in the application.

As a result of the foregoing amendment, the claims have been
amended to remove improper multiple dependencies.

Any additional fees or charges required at this time in connection
with the application may be charged to our Patent and Trademark Office
Deposit Account No. 11-1835.

Respectfully submitted,



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317 Madison Avenue
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March 21, 2002

FK:ml


ENCLS:

Amended Claims;
Marked-Up Version.

EXPRESS MAIL No.: EV 096 601 375 US

Deposited: March 21, 2002

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Friedrich Kueffner

CLEAN VERSION OF AMENDED CLAIMS

1. Device for actuating an electronic locking system and/or a lock mounted in a door (40), a flap or the like, in particular, for a vehicle,

comprising a handle (10) arranged on the exterior side (41) of the door, which handle has a projection (11), penetrating an opening (44) in the door (40) and projecting from the inner side (42) of the door and, serving as a bearing projection (11), having bearings (51), and comprising a support part (20) arranged on the inner side (42) of the door which supports a bearing block (21) having counter bearings (52) for the bearings (51) of the handle,

and the handle (10) has a handle interior (19) in which electric and/or electronic means are arranged which are connected by lines (18, 38) and an electric plug-in connection (30) with an electronic control device, wherein one electric coupling part (31) of the electric plug-in connection (30) is arranged on the bearing projection (11) of the handle (10),

wherein the handle (10) can be mounted with its bearing projection (11) from the exterior side (41) of the door,

wherein

the electrical coupling part (31) correlated with the handle (10) is arranged by means of a pivot bearing (71) on the bearing projection (11) of the handle (10),

and that the counter coupling part (32) correlated with the support part (20) of the electrical plug connection (30) is pivotably and/or slidably arranged on the support part (20).

2. Device according to claim 1, wherein the counter coupling part (32) correlated with the support part (20) is arranged by means of a pivot bearing (71) on the support part (20).
3. Device according to claim 1, wherein the counter coupling part (32) correlated with the support part (20) is arranged by means of a double pivot bearing (72) on the support part (20).
4. Device according to claim 1, wherein the counter coupling part (32) correlated with the support part (20) is arranged by means of a guide slot (27) on the support part (20).

5. Device according to claim 1, wherein on the bearing projection (11) securing means (13) are provided which detachably engage engagement points (37) of the electric coupling part (31).
6. Device according to claim 3, wherein the double pivot bearing (72) is comprised of two bearings (73, 74).
7. Device according to claim 6, wherein the two bearings (73, 74) are coupled with one another by means of a pivot lever (22).
8. Device according to claim 1, wherein in one half of the pivot lever (22) a bearing eye (23) is arranged in which a bearing pin (39) of the electrical counter coupling (32) is seated and, in this way, a first pivot bearing (74) is formed,

and that on the oppositely positioned half of the pivot lever (22) on the side facing the support part (20) a bearing pin (24) is provided whose one part is formed as a sliding block (26),

and that on the securing stay (20') of the support part (20) a bearing eye (28) is arranged into which a guide slot (27) opens from one side,

and that in a first position (75) of the bearing pin (24) the sliding block (26) is located in the guide slot (27) and the remaining part of the bearing pin (24) is located in the bearing eye (28),

while in a second position (76) the bearing pin (24) with its sliding block (26) is pivotable in the bearing eye (28).

9. Device according to claim 1, wherein the pivot bearing (71) is comprised of a bearing hole (17) arranged in the bearing projection (11) and a rotary bearing axle (36) arranged on the lower end of the electrical coupling part (31).
10. Device according to claim 1, wherein the securing means (13) engage in a first securing position (77) of the electrical coupling part (31) the engagement points (37) of the electrical coupling part (31),

while the securing means (13) in a second release position (778) are released from the engagement points (37) of the electrical coupling part (31) with release of the electrical coupling part (31).

MARKED-UP VERSION OF AMENDED CLAIMS

1. Device for actuating an electronic locking system and/or a lock mounted in a door (40), a flap or the like, in particular, for a vehicle,

comprising a handle (10) arranged on the exterior side (41) of the door, which handle has a projection (11), penetrating an opening (44) in the door (40) and projecting from the inner side (42) of the door and, serving as a bearing projection (11), having bearings (51), and comprising a support part (20) arranged on the inner side (42) of the door which supports a bearing block (21) having counter bearings (52) for the bearings (51) of the handle,

and the handle (10) has a handle interior (19) in which electric and/or electronic means are arranged which are connected by lines (18, 38) and an electric plug-in connection (30) with an electronic control device, wherein one electric coupling part (31) of the electric plug-in connection (30) is arranged on the bearing projection (11) of the handle (10),

wherein the handle (10) can be mounted with its bearing projection (11) from the exterior side (41) of the door,

[characterized in that] wherein

the electrical coupling part (31) correlated with the handle (10) is arranged by means of a pivot bearing (71) on the bearing projection (11) of the handle (10),

and that the counter coupling part (32) correlated with the support part (20) of the electrical plug connection (30) is pivotably and/or slidably arranged on the support part (20).

2. Device according to claim 1, [characterized in that] wherein the counter coupling part (32) correlated with the support part (20) is arranged by means of a pivot bearing (71) on the support part (20).
3. Device according to [claim 1 or 2, characterized in that] claim 1, wherein the counter coupling part (32) correlated with the support part (20) is arranged by means of a double pivot bearing (72) on the support part (20).
4. Device according to claim 1, [characterized in that] wherein the counter coupling part (32) correlated with the support part (20) is arranged by means of a guide slot (27) on the support part (20).

5. Device according to [one of the claims 1 to 4, characterized in that] claim 1, wherein on the bearing projection (11) securing means (13) are provided which detachably engage engagement points (37) of the electric coupling part (31).
6. Device according to claim 3, [characterized in that] wherein the double pivot bearing (72) is comprised of two bearings (73, 74).
7. Device according to claim 6, [characterized in that] wherein the two bearings (73, 74) are coupled with one another by means of a pivot lever (22).
8. Device according to [one of the claims 1, 3 and 6 to 7, characterized in that] claim 1, wherein in one half of the pivot lever (22) a bearing eye (23) is arranged in which a bearing pin (39) of the electrical counter coupling (32) is seated and, in this way, a first pivot bearing (74) is formed,

and that on the oppositely positioned half of the pivot lever (22) on the side facing the support part (20) a bearing pin (24) is provided whose one part is formed as a sliding block (26),

and that on the securing stay (20') of the support part (20) a bearing eye (28) is arranged into which a guide slot (27) opens

from one side,

and that in a first position (75) of the bearing pin (24) the sliding block (26) is located in the guide slot (27) and the remaining part of the bearing pin (24) is located in the bearing eye (28),

while in a second position (76) the bearing pin (24) with its sliding block (26) is pivotable in the bearing eye (28).

9. Device according to claim 1, [characterized in that] wherein the pivot bearing (71) is comprised of a bearing hole (17) arranged in the bearing projection (11) and a rotary bearing axle (36) arranged on the lower end of the electrical coupling part (31).
10. Device according to [one of the claims 1 and 5, characterized in that] claim 1, wherein the securing means (13) engage in a first securing position (77) of the electrical coupling part (31) the engagement points (37) of the electrical coupling part (31),

while the securing means (13) in a second release position (778) are released from the engagement points (37) of the electrical coupling part (31) with release of the electrical coupling part (31).

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Device for Actuating an Electronic Locking System and/or a Lock
Integrated in a Door, a Flap or the Like, Especially in a Motor
Vehicle

The second projection of the handle serves primarily as a further securing means of the handle on the door. The second projection can also be configured such that, upon actuation of the handle, it cooperates with lock members on the inner side of the door. Accordingly, by means of this working projection a lock can be actuated after actuation of the handle. Mounting of the handle is realized from the exterior side of the door where the bearing projection as well as the working projection are inserted through the respective openings in the door until they are in the prescribed position on the inner side of the door in the area of the bearing block, on the one hand, and in the area of the lock members, on the other hand. In order to achieve this, a certain movement sequence of the handle is required during the mounting movement through the door opening.

The electrical counter coupling part can have a shaped means which prevents pivoting of the electrical counter coupling part in the initial position of mounting. This could be, for example, a nose which is positioned within the opening area of the electrical counter coupling part.

Advantageously, the present invention can be produced relatively simply with regard to manufacturing technology. In comparison to normal door handles or coupling part arranged thereat only one bearing must be provided on the bearing projection of the door handle. The coupling part can be a commercially available electrical coupling part which must only be expanded by a bearing. Also, the employed counter coupling part can be a commercially available counter coupling part which is only modified.

In the mounted state the present electrical plug-in coupling has the advantage that the electrical coupling parts cannot move relative to one another upon a pivot movement of the handle. Accordingly, no wear of the electrical plug contact can result.

pin 39 of the electrical counter coupling part 32 is inserted. The bearing pin 39 and the bearing eye 23 from the bearing 74 on which the electrical counter coupling part 32 is pivotably arranged. The bearings 73 and 74 form together a double pivot bearing 72 defined by the pivot lever 22. On the electric counter coupling part 32 a supply and control line 38 is arranged via which the electrical counter coupling member 32 is connected to an electronic control.

Mounting of the device according to the invention is carried out in several movement steps. In Fig. 1 a first movement step of the assembly is illustrated. The door handle 10 is first inserted, corresponding to the direction of the insertion arrow 53, with its bearing projection 11 into the door opening 44 and, in this way, the electrical coupling part 31 is inserted, corresponding to the direction of arrow 60, into the electric counter coupling part 32. The bearing 74 is blocked during this process by the sliding block 26 which is positioned in the guide slot 27.

In Fig. 3 the position reached after this first mounting step is illustrated. The electrical coupling part 31 and the electrical counter coupling 32 form together the electrical plug-in connection 30 in which a contacting is achieved via the pin contacts 33 and the bushing contact 34 which are inserted into one another. The two coupling parts 31 and 32 are secured on one another by coupling means 31' and counter coupling means 32'. This connection is detachable for repair purposes or the like.

Fig. 3 illustrates a further mounting direction of the door handle 10. Corresponding to the illustrated rotational movement in the direction of rotation arrow 54, the projection/working projection

12 of the door handle 10 is pivoted into the door opening 45 of the door 40 from the exterior side 41. In this connection, the bearing 71 is moved in the rotational direction 54', and the securing means 13 is released in the direction of arrow 54'' from the engagement point 37 of the electrical coupling part 31. The electrical coupling part 31 and thus the electrical plug-in connection 30 are now in the release position 78.

At the end of this mounting movement, the leading end of the working projection 10 of the door handle 10 is positioned shortly behind the door opening 45, as illustrated in Fig. 4. Starting from this position, the door handle 10 is further pivoted in the direction of rotation arrow 55. In this connection, the rearward surface 14 of the bearing projection 11 rests against the stop 50 of the support part 20 and becomes the elbow of an elbow lever. The bearing projection 11 is pivoted in this connection in the direction of arrow 55'' on the stop 50. As a result of this pivot movement, a lateral movement 55' is exerted onto the bearing pin 24 and its sliding block 26 which thus moves out of the guide slot 27.

In Fig. 5 the position of the door handle 10 on the door 40 after completion of mounting movement 55 is illustrated. It is shown that the bearing pin 24 is now completely located within the bearing eye 28 and is thus also rotatable. In Fig. 5 moreover the further mounting movement of the door handle 10 is illustrated. Corresponding to arrow 56, the door handle 10 is moved farther into the door. This results in a rotation on the bearing 71 corresponding to the rotational direction 56''. The rotation of the bearing 73 is indicated by arrow 56'. Corresponding to the eccentricity of the pivot lever 22, its second bearing with the

Instead of the sliding block 26 and the guide slot 27 other means for securing a bearing can also be provided.

35 U-shaped bearing projection
36 rotary bearing axle of 35
37 engagement point for 13
38 supply and control line for 32
39 bearing pin on 32
40 door, door panel
41 exterior side of 40
42 inner side of 40
43 depression in 40
44 first door opening for 11
45 second door opening for 12
46 third door opening for 61

50 stop
51 bearing on 11
52 counter bearing on 21, 20
53 insertion arrow (mounting movement)
54 rotation arrow (mounting movement)
54' rotational direction bearing 71
54'' release movement of 13
55 rotation arrow (mounting movement)
55' retraction movement of 26
55'' rotational movement on stop 50
56 arrow (mounting movement)
56' rotational direction, bearing 73
56'' rotational direction, bearing 71
57 last pushing movement phase (mounting movement)
57' rotational movement on the bearing 73

60 arrow for insertion direction of 31 into 32

- 61 cylinder column
- 62 lock cylinder of 61
- 63 control member of 62

- 71 pivot bearing
- 72 double pivot bearing
- 73 bearing
- 74 bearing
- 75 first position of bearing pin 24
- 76 second position of bearing pin 24
- 77 securing position of the electrical coupling part (31)
- 78 release position of the electrical coupling part (31)

Claims

1. Device for actuating an electronic locking system and/or a lock mounted in a door (40), a flap or the like, in particular, for a vehicle,

comprising a handle (10) arranged on the exterior side (41) of the door, which handle has a projection (11), penetrating an opening (44) in the door (40) and projecting from the inner side (42) of the door and, serving as a bearing projection (11), having bearings (51), and comprising a support part (20) arranged on the inner side (42) of the door which supports a bearing block (21) having counter bearings (52) for the bearings (51) of the handle,

and the handle (10) has a handle interior (19) in which electric and/or electronic means are arranged which are connected by lines (18, 38) and an electric plug-in connection (30) with an electronic control device, wherein one electric coupling part (31) of the electric plug-in connection (30) is arranged on the bearing projection (11) of the handle (10),

wherein the handle (10) can be mounted with its bearing projection (11) from the exterior side (41) of the door,

characterized in that

the electrical coupling part (31) correlated with the handle (10) is arranged by means of a pivot bearing (71) on the bearing projection (11) of the handle (10),

and that the counter coupling part (32) correlated with the support part (20) of the electrical plug connection (30) is pivotably and/or slidably arranged on the support part (20).

2. Device according to claim 1, characterized in that the counter coupling part (32) correlated with the support part (20) is arranged by means of a pivot bearing (71) on the support part (20).
3. Device according to claim 1 or 2, characterized in that the counter coupling part (32) correlated with the support part (20) is arranged by means of a double pivot bearing (72) on the support part (20).
4. Device according to claim 1, characterized in that the counter coupling part (32) correlated with the support part (20) is arranged by means of a guide slot (27) on the support part (20).
5. Device according to one of the claims 1 to 4, characterized in that on the bearing projection (11) securing means (13) are provided which detachably engage engagement points (37) of the electric coupling part (31).
6. Device according to claim 3, characterized in that the double pivot bearing (72) is comprised of two bearings (73, 74).
7. Device according to claim 6, characterized in that the two bearings (73, 74) are coupled with one another by means of a pivot lever (22).

8. Device according to one of the claims 1, 3 and 6 to 7, characterized in that in one half of the pivot lever (22) a bearing eye (23) is arranged in which a bearing pin (39) of the electrical counter coupling (32) is seated and, in this way, a first pivot bearing (74) is formed,

and that on the oppositely positioned half of the pivot lever (22) on the side facing the support part (20) a bearing pin (24) is provided whose one part is formed as a sliding block (26),

and that on the securing stay (20') of the support part (20) a bearing eye (28) is arranged into which a guide slot (27) opens from one side,

and that in a first position (75) of the bearing pin (24) the sliding block (26) is located in the guide slot (27) and the remaining part of the bearing pin (24) is located in the bearing eye (28),

while in a second position (76) the bearing pin (24) with its sliding block (26) is pivotable in the bearing eye (28).

9. Device according to claim 1, characterized in that the pivot bearing (71) is comprised of a bearing hole (17) arranged in the bearing projection (11) and a rotary bearing axle (36) arranged on the lower end of the electrical coupling part (31).

10. Device according to one of the claims 1 and 5, characterized in that the securing means (13) engage in a first securing position (77) of the electrical coupling part (31) the engagement points (37) of the electrical coupling part (31), while the securing means (13) in a second release position (778) are released from the engagement points (37) of the electrical coupling part (31) with release of the electrical coupling part (31).

(12) NACH DEM VERTRAG ÜBER DIE INTERNATIONALE ZUSAMMENARBEIT AUF DEM GEBIET DES
PATENTWESENS (PCT) VERÖFFENTLICHTE INTERNATIONALE ANMELDUNG

(19) Weltorganisation für geistiges Eigentum
Internationales Büro



(43) Internationales Veröffentlichungsdatum
12. April 2001 (12.04.2001)

PCT

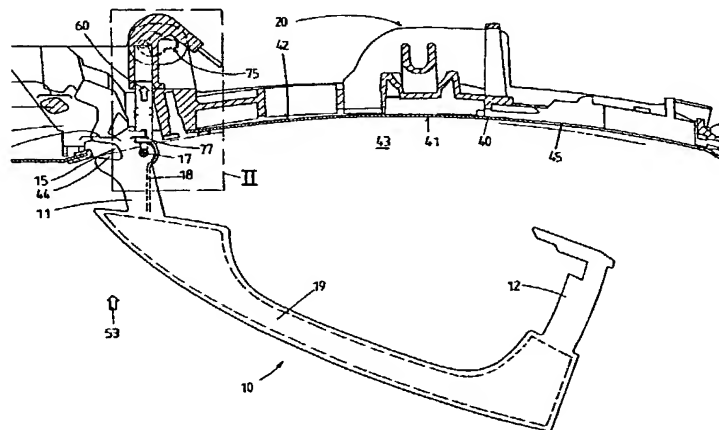
(10) Internationale Veröffentlichungsnummer
WO 01/25575 A1

- (51) Internationale Patentklassifikation⁷: E05B 65/20, 7/00, 17/22
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- (22) Internationales Anmeldedatum:
2. Oktober 2000 (02.10.2000)
- (25) Einreichungssprache: Deutsch
- (26) Veröffentlichungssprache: Deutsch
- (30) Angaben zur Priorität:
199 47 977.1 5. Oktober 1999 (05.10.1999) DE
- (71) Anmelder (für alle Bestimmungsstaaten mit Ausnahme von US): HUF HÜLSBECK & FÜRST GMBH & CO. KG [DE/DE]; Steeger Strasse 17, 42551 Velbert (DE).
- (72) Erfinder; und
- (75) Erfinder/Anmelder (nur für US): MATHOFER, Reinhold [DE/DE]; Eichendorffstrasse 7, 42489 Wülfrath (DE).
- (74) Anwalt: MENTZEL, Norbert; Kleiner Werth 34, 42275 Wuppertal (DE).
- (81) Bestimmungsstaaten (national): AU, BR, CN, IN, JP, KR, US.
- (84) Bestimmungsstaaten (regional): europäisches Patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE).
- Veröffentlicht:
— Mit internationalem Recherchenbericht.
— Vor Ablauf der für Änderungen der Ansprüche geltenden Frist; Veröffentlichung wird wiederholt, falls Änderungen eintreffen.

[Fortsetzung auf der nächsten Seite]

(54) Title: DEVICE FOR ACTUATING AN ELECTRONIC LOCKING SYSTEM AND/OR A LOCK INTEGRATED IN A DOOR, A FLAP OR THE LIKE, ESPECIALLY IN A MOTOR VEHICLE

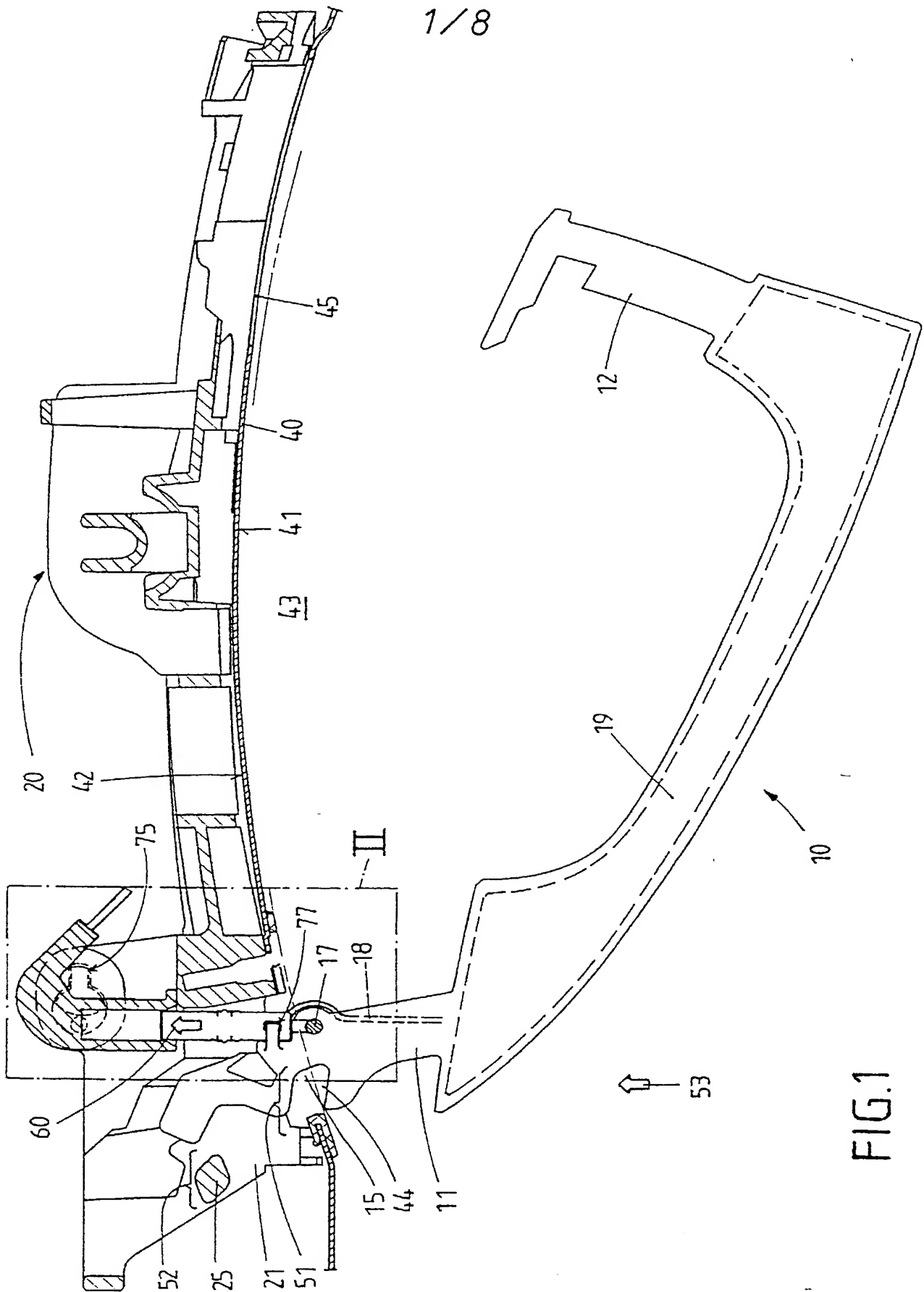
(54) Bezeichnung: VORRICHTUNG ZUR BETÄTIGUNG EINES ELEKTRONISCHEN SCHLIESSSYSTEMS UND/ODER EINES IN EINER TÜR, EINER Klappe OD. DGL. EINGEBAUTEN SCHLOSSES, INSBESONDERE BEI EINEM FAHRZEUG



(57) Abstract: The invention relates to a device for actuating an electronic locking system and/or a lock integrated in a door (40), a flap or the like, especially in a motor vehicle. Said locking system or lock is actuated by a handle (10) mounted on the door outer side (41). Said handle (10) is fixed to the door (40) by means of a support shoulder (11). The fixation can be of a swiveled type. Known door handles are provided with plug-in couplings mounted on the support shoulder (11) of the door handle (10) to contact the electronics mounted in the handle with control electronics. The aim of the invention is to simplify the manufacture of such a device. To this end, an electric coupling element (31) is swivelably mounted on the support shoulder (11). The support (20) on the door carries a swivelably and/or slideably mounted, electric counter coupling element (32). The inventive device allows that the electric coupling elements (31, 32) of the electric plug-in coupling (30) can be coupled into the door opening simultaneously with the insertion of the support shoulder (11) of the door handle (10), namely already in the first assembly stage.

[Fortsetzung auf der nächsten Seite]

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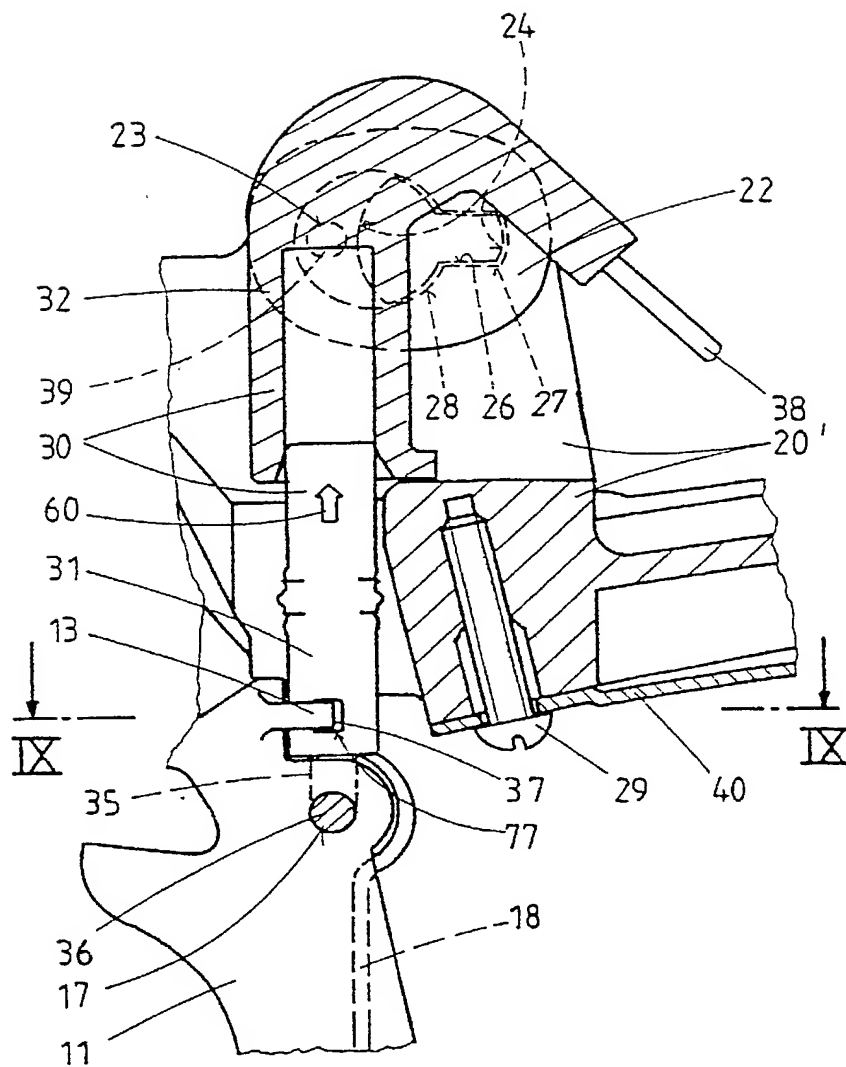
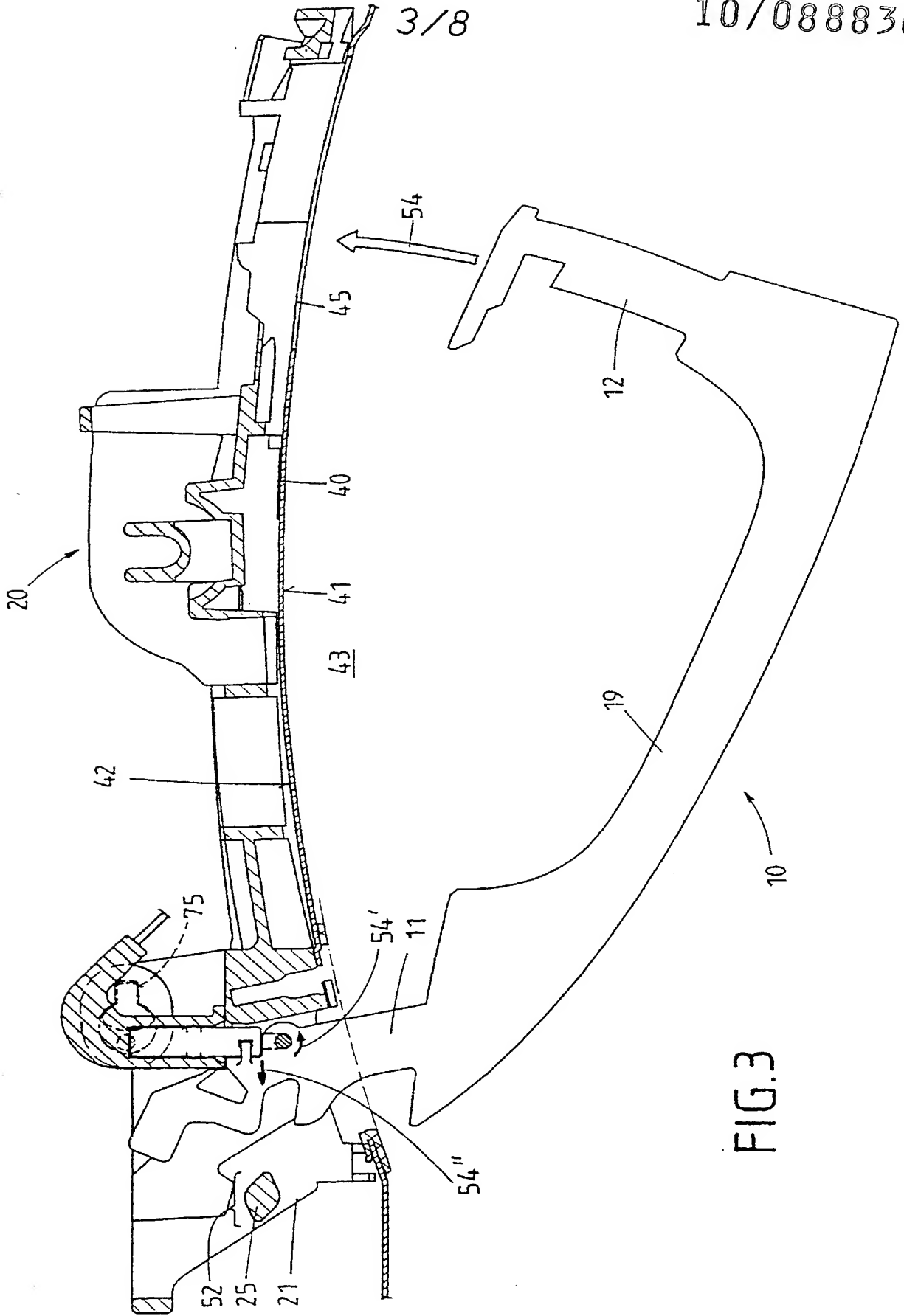
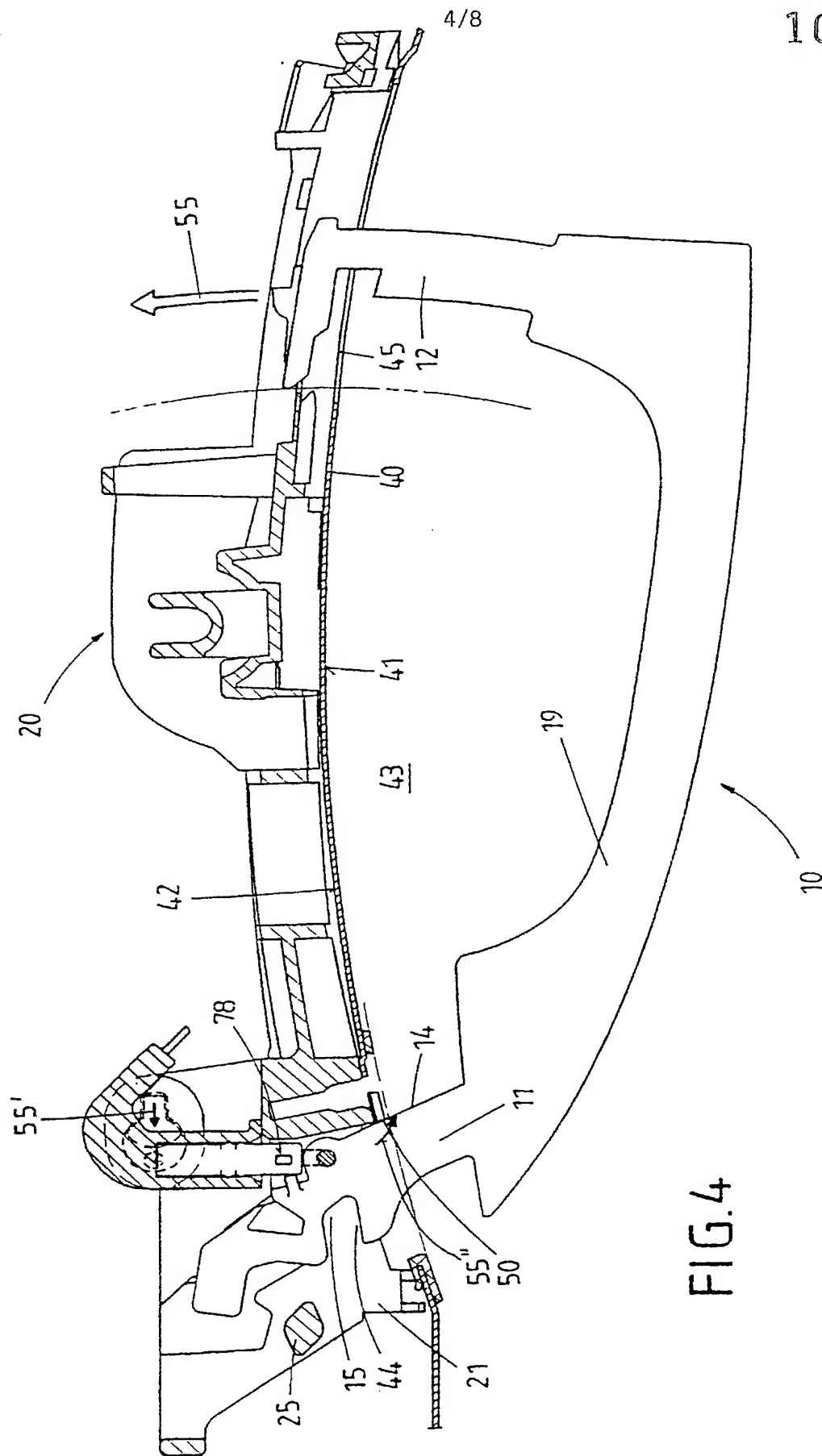
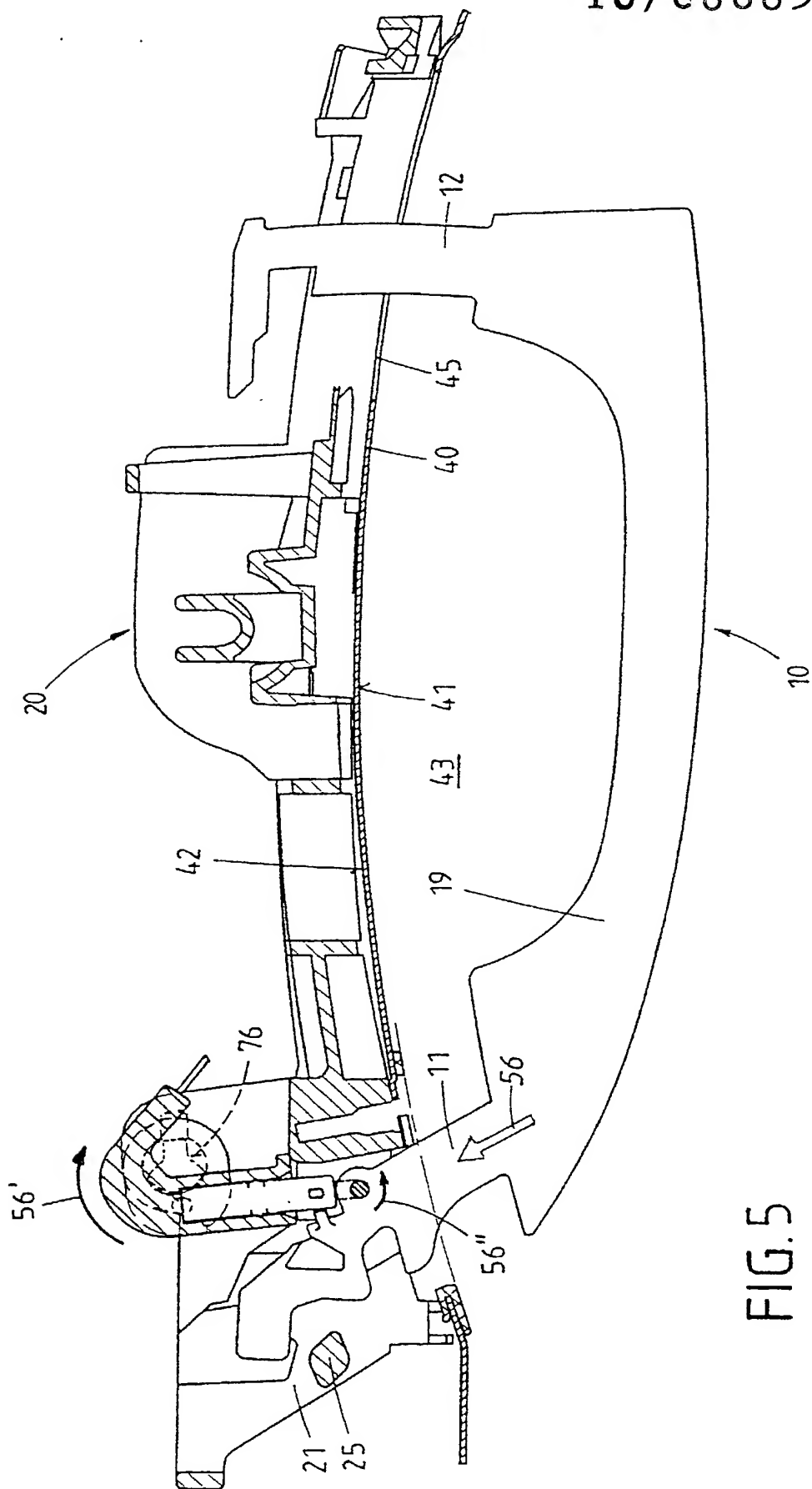


FIG.2







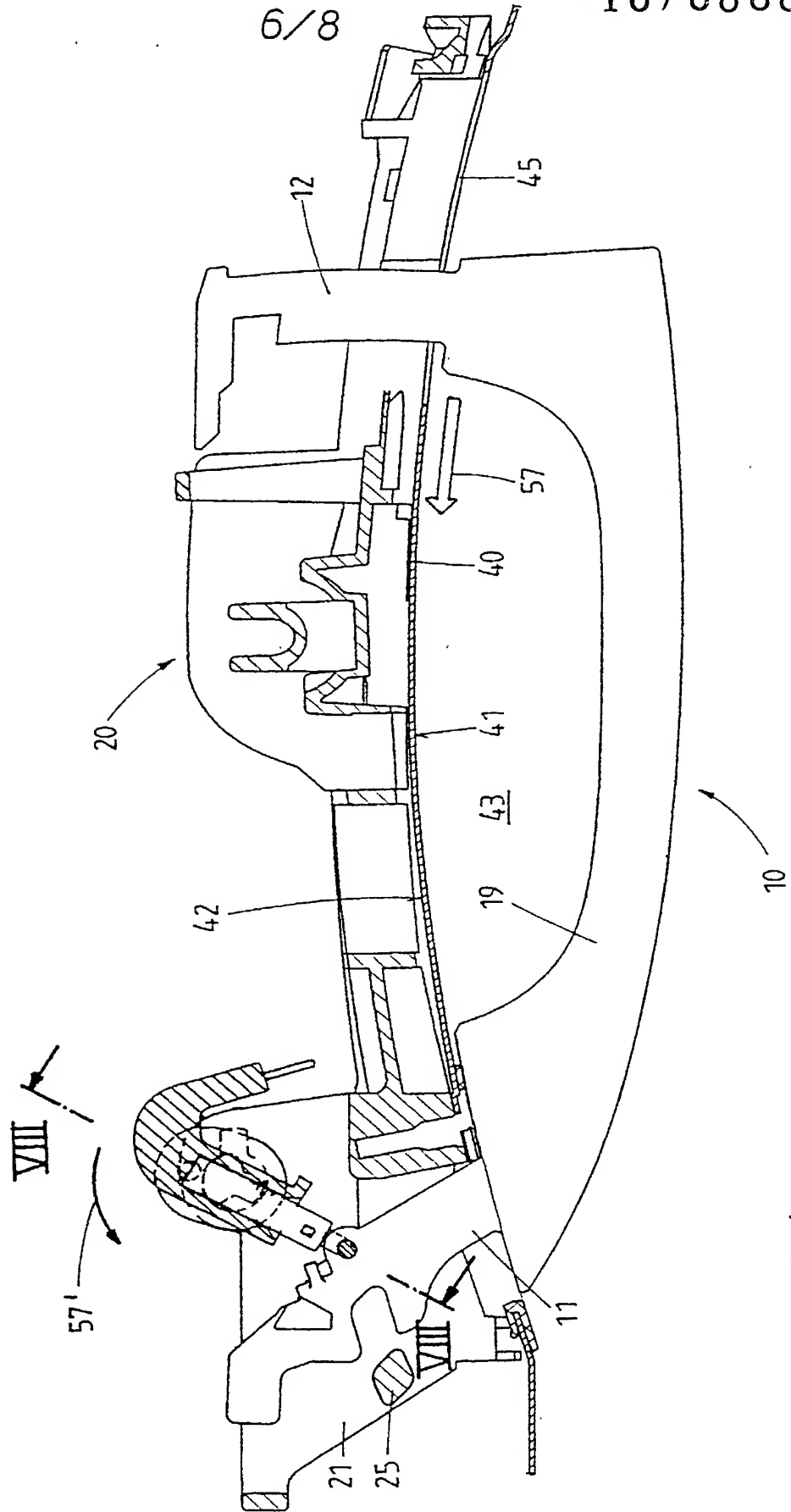


FIG. 6



FIG. 7



COMBINED DECLARATION FOR PARENT APPLICATION AND POWER OF ATTORNEY
(includes Reference to PCT International Applications)

Attorney's Docket No.
EM-87

As a below named inventor, I hereby declare that:
My residence, post office address and citizenship are as stated below next to my name,

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled: DEVICE FOR ACTUATING AN ELECTRONIC LOCKING SYSTEM AND/OR A LOCK INTEGRATED IN A DOOR, A FLAP OR THE LIKE, ESPECIALLY IN A MOTOR VEHICLE

the specification of which (check only one item below):

☐

is attached hereto.

☐

was filed as United States application

Serial No. _____
on _____
and was amended
on _____ (if applicable).

☒

was filed as PCT international application

Number PCT/EP00/09633
on October 2, 2000
and was amended under PCT Article 19
on _____ (if applicable).

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above. I acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, §1.56(a). I hereby claim foreign priority benefits under Title 35, United States Code, §119 of any foreign application(s) for patent or inventor's certificate or of any PCT international application(s) designating at least one country other than the United States of America listed below and have also identified below any foreign application(s) for patent or inventor's certificate or any PCT international application(s) designating at least one country other than the United States of America filed by me on the same subject matter having a filing date before that of the application(s) of which priority is claimed:

PRIOR FOREIGN/PCT APPLICATION(S) AND ANY PRIORITY CLAIMS UNDER 35 U.S.C. 119:

COUNTRY (if PCT, indicate PCT)	APPLICATION NUMBER	DATE OF FILING (day, month, year)	PRIORITY CLAIMED UNDER 35 USC 119
GERMANY	199 47 977.1	5 October 1999	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
			<input type="checkbox"/> YES <input type="checkbox"/> NO

Docket No.
BM-87

PRIOR U.S. APPLICATIONS OR PCT INTERNATIONAL APPLICATIONS DESIGNATING THE U.S. FOR
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